THROUGH THE AGES

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Photo courtesy of AMEDD Museum

Army medics prepare to load an injured Soldier onto an "air ambulance" during conflict in Vietnam.

In the long-running television series M*A*S*H, the opening scene revolves around U.S. Army doctors and nurses scrambling up a hill to retrieve injured Soldiers from litters attached to a single-seat helicopter.

While the show followed what happened to the patients, doctors and nurses, not much was said about the pilots of those aircraft. Those men were the solopilots.

They responded alone, often coaxing their helicopters to do things they were never designed to do.

They flew in conditions most sane pilots would never dream of flying in, and they saved thousands of lives during the Korean Conflict between 1952 and 1959.

"My personal experience as a solopilot was that approaching religion," said retired Lt. Col. Hank Capozzi, director of the Solopilots Society.

"Early on, I came to realize that I alone was actually being responsible for the survival and safety of a fellow human being. It was very heady stuff for a young lieutenant fresh out of flight school."

These pilots were actually U.S. Army Medical Service officers called to action by Maj. George E. Armstrong, the U.S. Army Surgeon General at the time.

In early 1952, Armstrong sent out word to his corps of officers – which included pharmacists, assistant battalion surgeons, lab officers, etc. – that if they met the required flight qualifications, they could volunteer for helicopter flight training.

While using helicopters for aeromedical evacuation had been discussed previously, the Korean Conflict threw into

… DUSTOFF IN VIETNAM

stark reality the need to quickly get Soldiers from the front lines to field hospitals.

The harsh Korean terrain and lack of passable roads made using ground ambulances all but impossible in some cases.

Helicopters had only been in full-scale production a mere 10 years at the outset of the Korean Conflict, but Army helicopters began to fly medical evacuation missions, sparing seriously wounded Soldiers punishing ambulance trips over Korea's wretched roads.

"They took these small observation helicopters with marginal piston engine power and converted them into functional ambulances," Capozzi said.

"They strapped patients to the outside in locally contrived litter racks and transported them to lifesaving surgical hospitals. It was this dedicated willingness and the ability to improvise that makes the solopilot unique.

"They performed these duties more than half a century ago, 24/7, in all weather conditions … alone."

Between their rescues of downed airmen and isolated ground troops and flying ambulance missions, U.S. helicopters were credited with saving tens of thousands of lives during the war, according to the article titled "The Rise of the Helicopter During the Korean War" by Otto Kreisher at http://www.HistoryNet.com.

"Few technical innovations were equal in importance to the growing use of the helicopter for medical evacuations," said an Army historian listed at the Web site.

"Costly, experimental and cranky, the helicopter could be justified only on the grounds that those it carried, almost to a man, would have died without it."

By the end of 1951, "evacuations of casualties by helicopter were no longer a Marine Corps specialty. It had become the American way," said U.S. Marine historian Lynn Montross in his book, "Cavalry of the Air: The Story of U.S. Marine Combat Helicopters."

During their first 12 months of operation in 1951, Army helicopters carried out 5,040 wounded service members. By mid-1953, even with the perils associated with early helicopters, the Army solopilots evacuated 1,273 casualties in a single month.

"I grew up playing team sports and was a firm believer that it took teamwork to be a winner," said retired Lt. Col. Raymond E. Smith.

"As a solopilot, I felt extreme satisfaction that I was a member of this team that was responsible for providing the necessary care to persons who required immediate medical care and attention."

See SOLOPILOTS AB24

SOLOPILOTS from AB13

This teamwork began with the first person to administer medical attention to the patient, on to all of those who provided their medical expertise to the patient.

"Knowing that I was the solopilot responsible for transporting the patient as expeditiously and safely to the next location and to those medical personnel who would provide the next level of medical care and treatment, I felt that our team won every time the flight was over and the patient was carried from my helicopter into the receiving medical facility," Smith added.

"The team members included not only the medical personnel but also the helicopter mechanics and other supporting staff members assigned to those units."

Photo courtesy of AMEDD Museum

The solopilots routinely flew in under-powered helicopters lacking navigational aids

Sometimes pilots had to act as their own mechanic, carrying spark plugs, fan belts and the tools to change them.

"I had the unpleasant task of having to change both during patient evacuations to an evac hospital," Capozzi said.

"One time it was replacing two fouled spark plugs while straddling a litter patient. The next time, it was fan belts, which were a real attention getter. When they broke, they slammed the control rods and gave me great pause while I attempted to ascertain which part of the helicopter had fallen off."

No takeoff with more than one patient was simple. Takeoff techniques were dictated by available power, which varied due to atmospheric conditions, winds and engine performance.

"The true indicator was 'can you hover,' and for how long," Capozzi added. "It was the pilot's skill that gave him the 'feeling' that he would reach flying speed (translational lift) before he ran out of power and space."

If a pilot did have sufficient power to sustain even a partial hover he would resort to a 'running' take off; sliding forward on the skids until flying speed was attained. In confined areas, if a hover was not sustainable, the solution was to remove the less critical patient. However, pilots would usually test the engines potential a bit beyond normal operating levels before leaving a patient behind.

"Landings were not as much a problem," Capozzi said. "We used fixed-wing landing approaches, flowing to a spot or pad and running out of altitude and air speed gently while avoiding obstacles."

Capozzi said his most unusual flight came because of an unusual patient.

"I flew a war dog medevac in Korea, the only dog mission in a 16-month tour. It was called in as a high-priority mission, to be flown to a Vet Det (veterinarian detachment) in Seoul," Capozzi said. "Since I could not get the dog and handler in the evac bag on the external litter rack, I transported both in a cozy H-13 'bubble' cockpit. The dog was big as a grizzly bear," Capozzi said. "It sat between the handler's legs. It was a tight fit, and it meant that the dog's giant jaws were never more than six inches from my hand.

"I actually asked the handler if the dog had flown before. He had not," Capozzi added. "I didn't want to ask what the handler would do if the dog violently objected to the ride en route to the vet. Fortunately, the dog was gentle, well behaved and very sick. The 30-minute flight was uneventful, but one most nervous ones I had in 20 years of helicopter air ambulance flying."

It wasn't until the start of a new decade that newer and larger helicopters like the Sikorsky H-19 Chickasaw and Bell UH-1 Huey were available to the U.S. Army and pilots no longer needed to respond alone.

Flying solitary missions in primitive helicopters, these pioneers performed all ambulance duties: pilot, co-pilot, medic and crew chief, unaided. They routinely flew hazardous missions in underpowered helicopters lacking navigational aids and limited to external litter carrying capabilities.

From the lessons learned on the battlefields of Korea, the solopilot's skill and dedication proved the helicopter's tactical importance in battlefield emergency medical care. Those same skills, over the next 50 years, would save thousands of American lives in places like Vietnam, Iraq and Afghanistan.

"Solopilots saved thousands of critically sick and injured patients during the 1950s," Capozzi said. "For me, the wonder of it all was the improvisation and 'playing it by ear' that made it possible."